

REMARKS

In the Office Action of January 30, 2003, claims 1-16, and 37-62 stand rejected. Claims 17-36 and 63-83 have been withdrawn. In this response, Claim 1 and 37 have been amended. Reconsideration and allowance of all pending claims are respectfully requested in view of the following remarks.

I. SPECIFICATION OBJECTIONS.

The specification has been amended per the examiner's request.

II. CLAIM REJECTIONS.

A. SECTION 112 REJECTIONS.

Claims 2 and 38 stand rejected under 35 U.S.C. §112 as non-enabling one skilled in the art to make the invention commensurate in scope with the claims. Specifically, the Examiner indicates that copper, gold, zinc and plutonium do not alloy with lithium.

Claims 1 and 37 have been amended to eliminate the limitation "wherein said temporary protective metal is capable of forming an alloy with lithium metal or is capable of diffusion into lithium metal". Thus, the method by which the temporary protective layer evanesces is not part of claim 1 or claim 37. Therefore, claim 2 and 38 provide a limitation as to the metals used to make the temporary protective layer and there is no limitation in the claims on how such layers evanesce. Thus, the teachings of the patents cited by the Examiner are irrelevant and the section 112 rejections should be withdrawn.

B. SECTION 102(B) REJECTIONS.

1. Anticipation by Shackle.

Claims 1, 2, 37-40, 54, 56, 61 and 62 stand rejected under 35 U.S.C. 102(b) as anticipated by U.S. Patent No. 5,436,091 issued to Shackle.

An invention is anticipated if the same device, including all the claim limitations, is shown in a single prior art reference; every element of the claimed invention must be literally present. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236 (Fed.Cir.1989). Accord *ATD Corp. v. Lydall, Inc.*, 159 F.3d 534, 544 (Fed.Cir.1998). Unless all the same elements are found in exactly the same situation and united in the same way to perform the identical function in a single prior art reference there is no anticipation. See *Structural Rubber Products Co. v. Park Rubber Co.*, 749 F.2d 707, 715 (Fed.Cir.1984).

Considering independent claim 1 and claim 37, the Examiner contends that *Shackle* discloses the limitation of these claims including the temporary layer, which the Examiner contends in *Shackle* is the copper foil upon which lithium is deposited to form the anode layer. The Examiner argues that since the copper layer in the Applicant's specification disappears it is inherent that the copper foil of *Shackle* will disappear. Applicant respectfully traverses the rejection.

Nowhere in *Shackle* is there disclosed, taught or suggested that the copper foil of the anode layer is temporary. As noted above, the anticipation reference must, by itself, literally disclose every element of the claimed invention. *Shackle* does not disclose, teach or suggest that the copper foil of the anode layer is temporary. The use of the Applicant's specification to support the rejection is incorrect since (1) it relies on more than a single reference to establish the anticipation rejection and (2) the applicant does not teach that in all circumstances a copper layer will be temporary; thus, it the Applicant's specification does not teach that the evanescence of copper or other metals is inherent under all conditions. Indeed, the copper layer of *Shackle* could not be temporary. The copper layer of *Shackle* provides the structure that the anode active material is deposited on, if the copper layer was temporary, the anode would lose structural integrity in use, during charge and discharge cycles and in storage. Therefore, it is inherent in *Shackle* that the copper foil of the anode layer is not temporary. Since a prima facie case for anticipation has not been made, the rejection of claims 1 and 37 must be withdrawn.

Considering claims 2, 38-40, 54, 56, 61 and 62, claim 2 depends on the allowable claim 1, and claims 38-40, 54, 56, 61 and 62 depend from allowable claim 37. Therefore, claims 2, 38-40, 54, 56, 61 and 62 are in condition for allowance.

2. Anticipation by Kawakami.

Claims 1, 2, 4, 5-7, 9, 11, 12, 14, 15, 37, 38, 39, 40, 42, 43, 44, 46, 48, 49, 51, 52, 54, 55, 56 and 61 stand rejected under 35 U.S.C. §102(b) as anticipated by Kawakami et al.

Considering independent claim 1 and claim 37, The Examiner argues that *Kawakami* discloses the limitations of these claims where the claimed temporary layer is the conductor layer in *Kawakami*. The Examiner argues that the copper layer would inherently form an alloy with the lithium anode layer. Presumably the Examiner's argument on the inherency of alloying is based on the applicant's disclosure. Applicant respectfully traverses the rejection.

Nowhere in *Kawakami* is there disclosed, taught or suggested that the copper conductor layer is temporary. As noted above, the anticipation reference must, by itself, literally disclose every element of the claimed invention. *Kawakami* does not disclose, teach or suggest that the copper conductor layer is temporary. The use of the Applicant's specification to support the rejection is incorrect since (1) it relies on more than a single reference to establish the anticipation rejection and (2) the applicant does not teach that in all circumstances a copper layer will be temporary, therefore it is not inherent that the copper will disappear. Indeed, the copper layer of *Kawakami* could not be temporary. Since the copper layer of *Kawakami* provides the mechanism to prevent dendrite formation in the cell, if the copper layer was temporary, dendrite formation would not be stopped. Therefore, it is inherent in *Kawakami* that the copper conductor layer is not and cannot be temporary. Since a prima facie case for anticipation has not been made, the rejection of claims 1 and 37 must be withdrawn.

Considering claims 2, 4, 5-7, 9, 11, 12, 14, 15, 38, 39, 40, 42, 43, 44, 46, 48, 49, 51, 52, 54, 55, 56 and 61, claims 2, 4-7, 9, 11, 12, 14, and 15 depend on the allowable claim 1, and claims 38, 39, 40, 42, 43, 44, 46, 48, 49, 51, 52, 54, 55, 56 and 61 depend from allowable claim 37. Therefore, claims 2 claims 1, 2, 4, 5-7, 9, 11, 12, 14, 15, 37, 38, 39, 40, 42, 43, 44, 46, 48, 49, 51, 52, 54, 55, 56 and 61 are in condition for allowance.

C. Section 103 Rejections

1. Kawakami in view of Chu

Claims 8 and 45 stand rejected as unpatentable over *Kawakami* in view of Chu. Claim 8 depends from allowable claim 1 and claim 45 depends from allowable claim 37. Therefore, claims 8 and 45 are allowable.

2. Kawakami in view of Shackle

Claims 13 and 50 stand rejected as unpatentable over *Kawakami* as applied to claims 11 and 48 and further in view of *Shackle*. Claim 13 depends from allowable claim 1 and claim 50 depends from allowable claim 37. Therefore, claims 13 and 50 are allowable.

3. Kawakami in view of Tonder

Claims 3 and 41 stand rejected as unpatentable over *Kawakami* as applied to claims 1 and 37 and further in view of Tonder. Claim 3 depends from allowable claim 1 and claim 41 depends from allowable claim 37. Therefore, claims 3 and 41 are allowable.

4. Kawakami in view of WO 99/33125

Claims 57-60 stand rejected as unpatentable over *Kawakami* as applied to claim 37, and further in view of WO 99/33125. Claims 50-60 depend from allowable claim 37. Therefore, claims 57-60 are allowable.

5. Kawakami in view of Gozdz

Claims 16 and 53 stand rejected as unpatentable over *Kawakami* as applied to claims 14 and 51 and further in view of Gozdz. Claim 16 depends from allowable claim 1 and claim 53 depends from allowable claim 37. Therefore, claims 16 and 53 are allowable.

C. DOUBLE PATENTING.

Claims 1 and 2 stand provisionally rejected under the judicially created doctrine of obviousness- type double patenting as being unpatentable over claim 21 of co-pending

application No. 10/025,651. A terminal disclaimer will be submitted upon allowance of the above claims, in response to this rejection.

D. ALLOWABLE SUBJECT MATTER.

Applicant acknowledges that claims 10 and 47 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

IV. CONCLUSION

For the foregoing reasons, the Application is believed to be in condition for allowance and favorable action is respectfully requested. The examiner is invited to telephone the undersigned at the telephone number listed below if it would in any way advance prosecution of this case.

Applicant petitions for a 1-month extension of time to move the period for a response from April 30, 2003 to May 30, 2003. Please charge the necessary fee to Deposit Account No. 19-3878.

While no other fees are believed due, applicants hereby request that any other required fee to maintain pendency of this case, except for the Issue Fee, be charged to Deposit Account No. 19-3878.

Respectfully submitted,

May 30, 2003
Date

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